



## Gulf of Mexico Harmful Algal Bloom Bulletin

18 April 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

Last bulletin: April 14, 2005

**Conditions:** A harmful algal bloom has been identified off of Manatee and Sarasota Counties. Patchy moderate to high impacts are possible Tuesday, with patchy very low impacts likely Wednesday through Thursday.

**Analysis:** SW Florida - The bloom continues to dissipate. Chlorophyll levels are generally less than 3  $\mu\text{g/L}$  onshore from Clearwater to Englewood and are higher inside Tampa Bay and at the entrance (4.78  $\mu\text{g/L}$ ; 27°28'N, 82°48'W). Medium to high concentrations of *Karenia* and fish kills were reported for Palma Sola Bay on April 12th (FWRI). Respiratory effects were reported last week for Siesta Key. Movement of the bloom is constricted by the bay systems and intensification is unlikely. Primarily offshore winds expected this week except Tuesday, where onshore winds and onshore transport may cause patchy moderate to high impacts within Palma Soda Bay and very low impacts within Sarasota Bay.

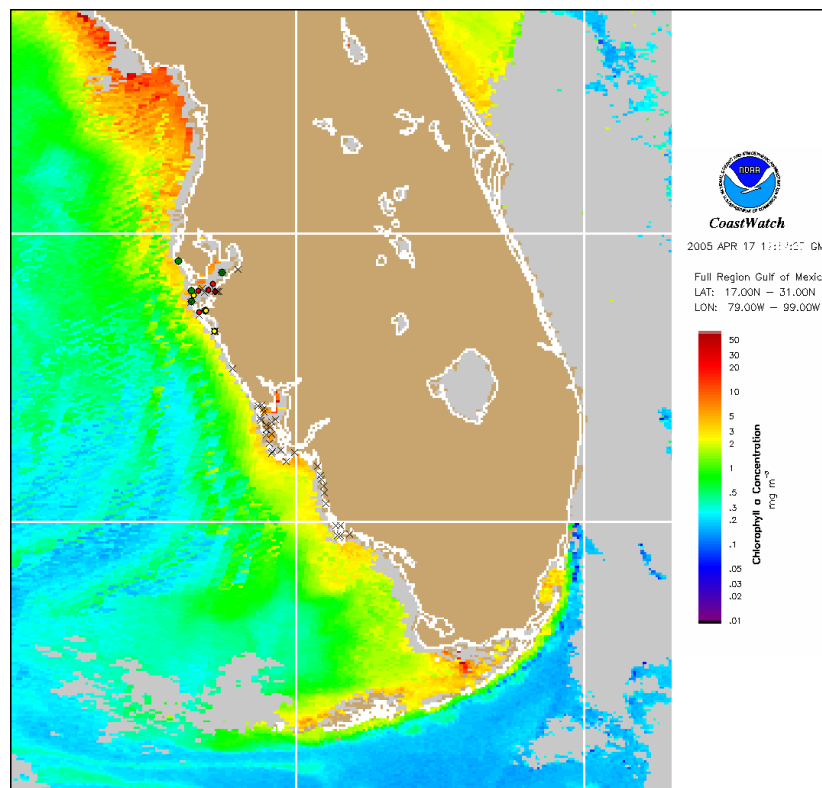
**Cedar Key:** FWRI reported a visual sighting of reddish discoloration 3-5 miles west of Cedar Key on April 13. Imagery on April 17 indicates a large band along the coast. Chlorophyll is generally less than 12  $\mu\text{g/L}$  with chlorophyll highs of greater than 25  $\mu\text{g/L}$  located southwest of Cedar Key at 29°2'N, 83°8'W. Sampling is recommended.

**Keys:** No recent samples are available in the Keys. Imagery indicates a chlorophyll high of 6.31  $\mu\text{g/L}$  northwest of Marathon.

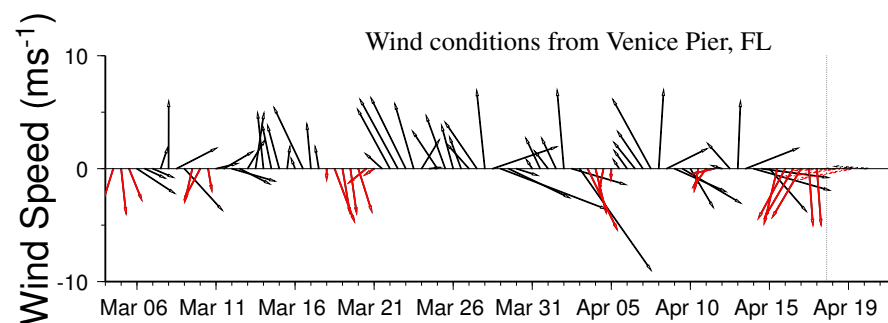
Fenstermacher, Fisher & Keller

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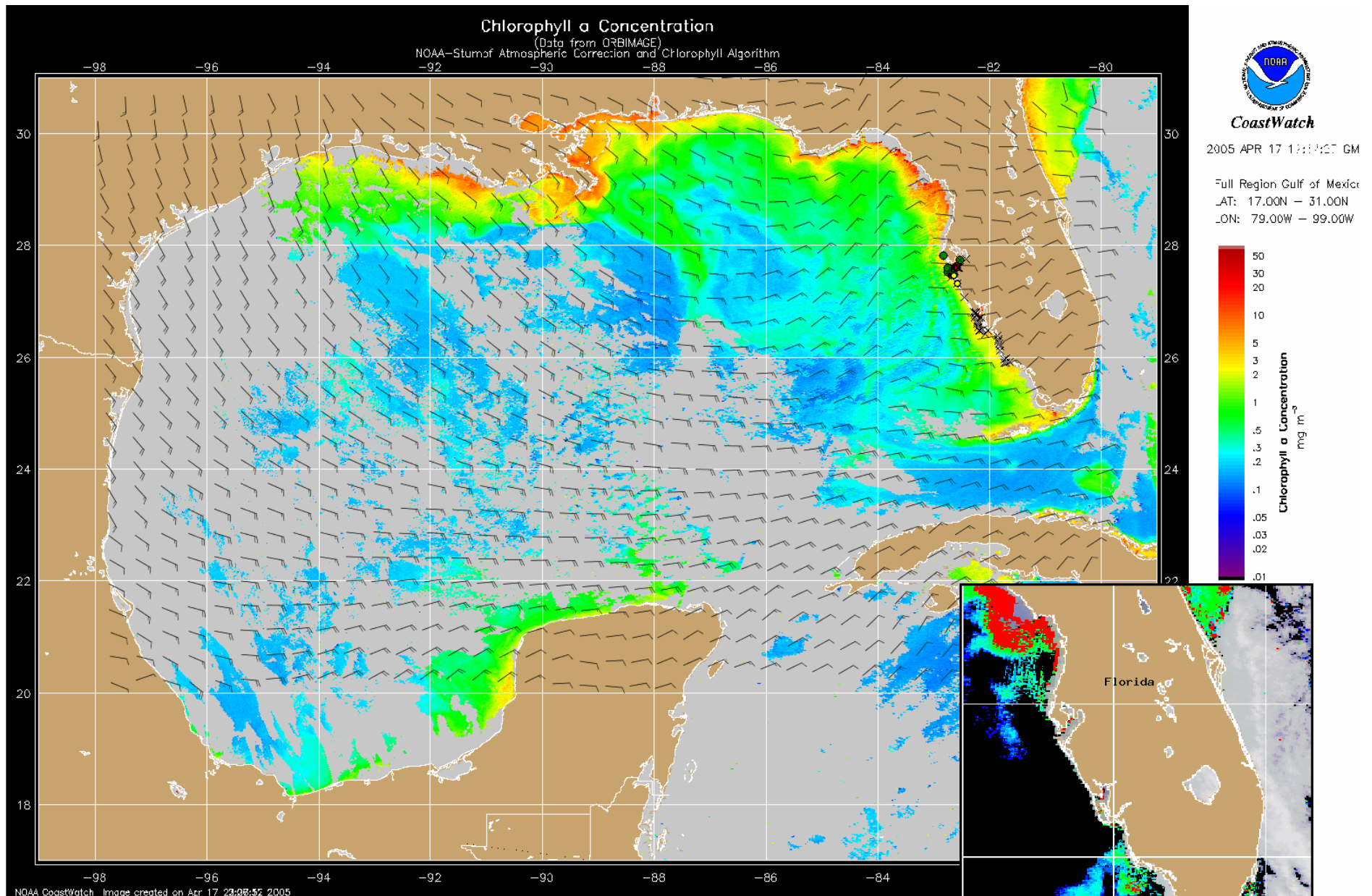


Chlorophyll concentration from satellite with possible HAB areas shown by red polygon(s). Cell concentration sampling data from April 1, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

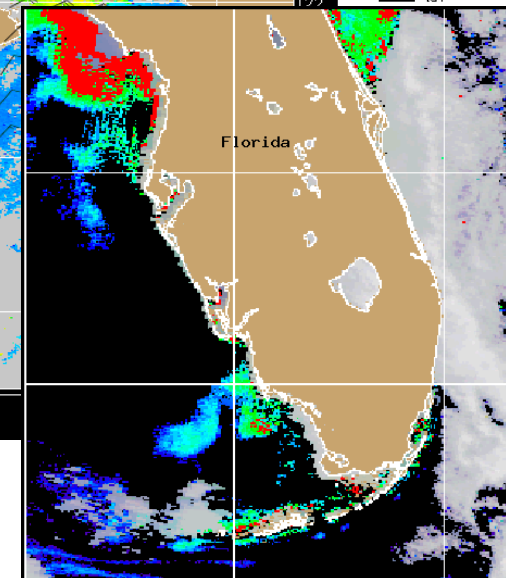


Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Northeasterlies today followed by easterlies tonight (10-15 knots; 5-8 m/s). Southeasterlies Tuesday morning becoming onshore winds in the afternoon (10 knots; 5 m/s). Light easterlies Tuesday night through Thursday (5-10 knots; 3-5 m/s).



Chlorophyll concentration from satellite and forecast winds for April 19, 2005 06Z with cell concentration sampling data from April 1, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Blooms shown in red (see p. 1 analysis and image for interpretation)